

SEQUENCE LISTING

10/502244

<110> VLAAMS INTERUNIVERSITAIR INSTITUUT VOOR BIOTECHNOLOGIE VZW

<120> A NOVEL TARGET TO INHIBIT ANGIOGENESIS

<130> VIB-034-PCT

<150> EP02075544.3

<151> 2002-02-08

<150> EP02077742.1

<151> 2002-07-09

<150> EP03100148.0

<151> 2003-01-24

<160> 2

<170> PatentIn version 3.1

<210> 1

<211> 3794

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (38)..(2635)

<223>

<400> 1

ccaagttcta cctcatgttt ggaggatcctt gctagct atg gcc ctc gta ctc ggc 55  
Met Ala Leu Val Leu Gly  
1 5

tcc ctg ttg ctg ctg ggg ctg tgc ggg aac tcc ttt tca gga ggg cag 103

Ser	Leu	Leu	Leu 10	Leu	Gly	Leu	Cys	Gly 15	Asn	Ser	Phe	Ser	Gly 20	Gly	Gln	
cct Pro	tca Ser	tcc Ser 25	aca Thr	gat Asp	gct Ala	cct Pro	aag Lys 30	gct Ala	tgg Trp	aat Asn	tat Tyr	gaa Glu 35	ttg Leu	cct Pro	gca Ala	151
aca Thr	aat Asn 40	tat Tyr	gag Glu	acc Thr	caa Gln	gac Asp 45	tcc Ser	cat His	aaa Lys	gct Ala	gga Gly 50	ccc Pro	att Ile	ggc Gly	att Ile	199
ctc Leu 55	ttt Phe	gaa Glu	cta Leu	gtg Val	cat His 60	atc Ile	ttt Phe	ctc Leu	tat Tyr	gtg Val 65	gta Val	cag Gln	ccg Pro	cgt Arg	gat Asp 70	247
ttc Phe	cca Pro	gaa Glu	gat Asp	act Thr 75	ttg Leu	aga Arg	aaa Lys	ttc Phe	tta Leu 80	cag Gln	aag Lys	gca Ala	tat Tyr	gaa Glu 85	tcc Ser	295
aaa Lys	att Ile	gat Asp	tat Tyr 90	gac Asp	aag Lys	cca Pro	gaa Glu	act Thr 95	gta Val	atc Ile	tta Leu	ggt Gly	cta Leu 100	aag Lys	att Ile	343
gtc Val	tac Tyr	tat Tyr 105	gaa Glu	gca Ala	ggg Gly	att Ile	att Ile 110	cta Leu	tgc Cys	tgt Cys	gtc Val	ctg Leu 115	ggg Gly	ctg Leu	ctg Leu	391
ttt Phe	att Ile 120	att Ile	ctg Leu	atg Met	cct Pro	ctg Leu 125	gtg Val	ggg Gly	tat Tyr	ttc Phe	ttt Phe 130	tgt Cys	atg Met	tgt Cys	cgt Arg	439
tgc Cys 135	tgt Cys	aac Asn	aaa Lys	tgt Cys	ggt Gly 140	gga Gly	gaa Glu	atg Met	cac His	cag Gln 145	cga Arg	cag Gln	aag Lys	gaa Glu	aat Asn 150	487
ggg Gly	ccc Pro	ttc Phe	ctg Leu	agg Arg 155	aaa Lys	tgc Cys	ttt Phe	gca Ala	atc Ile 160	tcc Ser	ctg Leu	ttg Leu	gtg Val	att Ile 165	tgt Cys	535
ata Ile	ata Ile	ata Ile	agc Ser 170	att Ile	ggc Gly	atc Ile	ttc Phe	tat Tyr 175	ggt Gly	ttt Phe	gtg Val	gca Ala	aat Asn 180	cac His	cag Gln	583
gta Val	aga Arg	acc Thr 185	cgg Arg	atc Ile	aaa Lys	agg Arg	agt Ser 190	cgg Arg	aaa Lys	ctg Leu	gca Ala	gat Asp 195	agc Ser	aat Asn	ttc Phe	631
aag Lys	gac Asp 200	ttg Leu	cga Arg	act Thr	ctc Leu	ttg Leu 205	aat Asn	gaa Glu	act Thr	cca Pro	gag Glu 210	caa Gln	atc Ile	aaa Lys	tat Tyr	679
ata Ile 215	ttg Leu	gcc Ala	cag Gln	tac Tyr	aac Asn 220	act Thr	acc Thr	aag Lys	gac Asp	aag Lys 225	gcg Ala	ttc Phe	aca Thr	gat Asp	ctg Leu 230	727
aac Asn	agt Ser	atc Ile	aat Asn	tca Ser 235	gtg Val	cta Leu	gga Gly	ggc Gly	gga Gly 240	att Ile	ctt Leu	gac Asp	cga Arg	ctg Leu 245	aga Arg	775
ccc Pro	aac Asn	atc Ile	atc Ile 250	cct Pro	gtt Val	ctt Leu	gat Asp	gag Glu 255	att Ile	aag Lys	tcc Ser	atg Met	gca Ala 260	aca Thr	gcg Ala	823
atc Ile	aag Lys	gag Glu 265	acc Thr	aaa Lys	gag Glu	gcg Ala	ttg Leu 270	gag Glu	aac Asn	atg Met	aac Asn	agc Ser 275	acc Thr	ttg Leu	aag Lys	871
agc	ttg	cac	caa	caa	agt	aca	cag	ctt	agc	agc	agt	ctg	acc	agc	gtg	919

## VIB-034-PCT.ST25.txt

Ser 280	Leu	His	Gln	Gln	Ser	Thr 285	Gln	Leu	Ser	Ser	Ser 290	Leu	Thr	Ser	Val	
aaa Lys 295	act Thr	agc Ser	ctg Leu	cgg Arg	tca Ser 300	tct Ser	ctc Leu	aat Asn	gac Asp	cct Pro 305	ctg Leu	tgc Cys	ttg Leu	gtg Val	cat His 310	967
cca Pro	tca Ser	agt Ser	gaa Glu	acc Thr 315	tgc Cys	aac Asn	agc Ser	atc Ile	aga Arg 320	ttg Leu	tct Ser	cta Leu	agc Ser	cag Gln 325	ctg Leu	1015
aat Asn	agc Ser	aac Asn	cct Pro 330	gaa Glu	ctg Leu	agg Arg	cag Gln	ctt Leu 335	cca Pro	ccc Pro	gtg Val	gat Asp	gca Ala 340	gaa Glu	ctt Leu	1063
gac Asp	aac Asn	gtt Val 345	aat Asn	aac Asn	gtt Val	ctt Leu	agg Arg 350	aca Thr	gat Asp	ttg Leu	gat Asp	ggc Gly 355	ctg Leu	gtc Val	caa Gln	1111
cag Gln	ggc Gly 360	tat Tyr	caa Gln	tcc Ser	ctt Leu	aat Asn 365	gat Asp	ata Ile	cct Pro	gac Asp	aga Arg 370	gta Val	caa Gln	cgc Arg	caa Gln	1159
acc Thr 375	acg Thr	act Thr	gtc Val	gta Val	gca Ala 380	ggg Gly	atc Ile	aaa Lys	agg Arg	gtc Val 385	ttg Leu	aat Asn	tcc Ser	att Ile	ggg Gly 390	1207
tca Ser	gat Asp	atc Ile	gac Asp	aat Asn 395	gta Val	act Thr	cag Gln	cggt Arg	ctt Leu 400	cct Pro	att Ile	cag Gln	gat Asp	ata Ile 405	ctc Leu	1255
tca Ser	gca Ala	ttc Phe	tct Ser 410	gtt Val	tat Tyr	gtt Val	aat Asn	aac Asn 415	act Thr	gaa Glu	agt Ser	tac Tyr	atc Ile 420	cac His	aga Arg	1303
aat Asn	tta Leu	cct Pro 425	aca Thr	ttg Leu	gaa Glu	gag Glu	tat Tyr 430	gat Asp	tca Ser	tac Tyr	tgg Trp	tgg Trp 435	ctg Leu	ggg Gly	ggc Gly	1351
ctg Leu	gtc Val 440	atc Ile	tgc Cys	tct Ser	ctg Leu	ctg Leu 445	acc Thr	ctc Leu	atc Ile	gtg Val 450	att Ile	ttt Phe	tac Tyr	tac Tyr	ctg Leu	1399
ggc Gly 455	tta Leu	ctg Leu	tgt Cys	ggc Gly	gtg Val 460	tgc Cys	ggc Gly	tat Tyr	gac Asp	agg Arg 465	cat His	gcc Ala	acc Thr	ccg Pro	acc Thr 470	1447
acc Thr	cga Arg	ggc Gly	tgt Cys	gtc Val 475	tcc Ser	aac Asn	acc Thr	gga Gly	ggc Gly 480	gtc Val	ttc Phe	ctc Leu	atg Met	gtt Val 485	gga Gly	1495
gtt Val	gga Gly	tta Leu	agt Ser 490	ttc Phe	ctc Leu	ttt Phe	tgc Cys	tgg Trp 495	ata Ile	ttg Leu	atg Met	atc Ile	att Ile 500	gtg Val	gtt Val	1543
ctt Leu	acc Thr	ttt Phe 505	gtc Val	ttt Phe	ggg Gly	gca Ala	aat Asn 510	gtg Val	gaa Glu	aaa Lys	ctg Leu	atc Ile 515	tgt Cys	gaa Glu	cct Pro	1591
tac Tyr	acg Thr 520	agc Ser	aag Lys	gaa Glu	tta Leu	ttc Phe 525	cgg Arg	gtt Val	ttg Leu	gat Asp	aca Thr 530	ccc Pro	tac Tyr	tta Leu	cta Leu	1639
aat Asn 535	gaa Glu	gac Asp	tgg Trp	gaa Glu	tac Tyr 540	tat Tyr	ctc Leu	tct Ser	ggg Gly	aag Lys 545	cta Leu	ttt Phe	aat Asn	aaa Lys	tca Ser 550	1687
aaa	atg	aag	ctc	act	ttt	gaa	caa	gtt	tac	agt	gac	tgc	aaa	aaa	aat	1735

## VIB-034-PCT.ST25.txt

Lys	Met	Lys	Leu	Thr 555	Phe	Glu	Gln	Val	Tyr 560	Ser	Asp	Cys	Lys	Lys 565	Asn	
aga	ggc	act	tac	ggc	act	ctt	cac	ctg	cag	aac	agc	ttc	aat	atc	agt	1783
Arg	Gly	Thr	Tyr 570	Gly	Thr	Leu	His	Leu 575	Gln	Asn	Ser	Phe	Asn 580	Ile	Ser	
gaa	cat	ctc	aac	att	aat	gag	cat	act	gga	agc	ata	agc	agt	gaa	ttg	1831
Glu	His	Leu 585	Asn	Ile	Asn	Glu	His 590	Thr	Gly	Ser	Ile	Ser 595	Ser	Glu	Leu	
gaa	agt	ctg	aag	gta	aat	ctt	aat	atc	ttt	ctg	ttg	ggt	gca	gca	gga	1879
Glu	Ser 600	Leu	Lys	Val	Asn	Leu 605	Asn	Ile	Phe	Leu	Leu 610	Gly	Ala	Ala	Gly	
aga	aaa	aac	ctt	cag	gat	ttt	gct	gct	tgt	gga	ata	gac	aga	atg	aat	1927
Arg	Lys	Asn	Leu	Gln	Asp 620	Phe	Ala	Ala	Cys	Gly 625	Ile	Asp	Arg	Met	Asn 630	
tat	gac	agc	tac	ttg	gct	cag	act	ggt	aaa	tcc	ccc	gca	gga	gtg	aat	1975
Tyr	Asp	Ser	Tyr	Leu 635	Ala	Gln	Thr	Gly	Lys 640	Ser	Pro	Ala	Gly	Val 645	Asn	
ctt	tta	tca	ttt	gca	tat	gat	cta	gaa	gca	aaa	gca	aac	agt	ttg	ccc	2023
Leu	Leu	Ser	Phe 650	Ala	Tyr	Asp	Leu	Glu 655	Ala	Lys	Ala	Asn	Ser 660	Leu	Pro	
cca	gga	aat	ttg	agg	aac	tcc	ctg	aaa	aga	gat	gca	caa	act	att	aaa	2071
Pro	Gly	Asn 665	Leu	Arg	Asn	Ser	Leu 670	Lys	Arg	Asp	Ala	Gln 675	Thr	Ile	Lys	
aca	att	cac	cag	caa	cga	gtc	ctt	cct	ata	gaa	caa	tca	ctg	agc	act	2119
Thr	Ile 680	His	Gln	Gln	Arg	Val 685	Leu	Pro	Ile	Glu	Gln 690	Ser	Leu	Ser	Thr	
cta	tac	caa	agc	gtc	aag	ata	ctt	caa	cgc	aca	ggg	aat	gga	ttg	ttg	2167
Leu 695	Tyr	Gln	Ser	Val	Lys 700	Ile	Leu	Gln	Arg	Thr 705	Gly	Asn	Gly	Leu	Leu 710	
gag	aga	gta	act	agg	att	cta	gct	tct	ctg	gat	ttt	gct	cag	aac	ttc	2215
Glu	Arg	Val	Thr	Arg 715	Ile	Leu	Ala	Ser	Leu 720	Asp	Phe	Ala	Gln	Asn 725	Phe	
atc	aca	aac	aat	act	tcc	tct	gtt	att	att	gag	gaa	act	aag	aag	tat	2263
Ile	Thr	Asn	Asn 730	Thr	Ser	Ser	Val	Ile 735	Ile	Glu	Glu	Thr	Lys 740	Lys	Tyr	
ggg	aga	aca	ata	ata	gga	tat	ttt	gaa	cat	tat	ctg	cag	tgg	atc	gag	2311
Gly	Arg	Thr 745	Ile	Ile	Gly	Tyr	Phe 750	Glu	His	Tyr	Leu	Gln 755	Trp	Ile	Glu	
ttc	tct	atc	agt	gag	aaa	gtg	gca	tcg	tgc	aaa	cct	gtg	gcc	acc	gct	2359
Phe	Ser 760	Ile	Ser	Glu	Lys	Val 765	Ala	Ser	Cys	Lys	Pro 770	Val	Ala	Thr	Ala	
cta	gat	act	gct	gtt	gat	gtc	ttt	ctg	tgt	agc	tac	att	atc	gac	ccc	2407
Leu 775	Asp	Thr	Ala	Val	Asp 780	Val	Phe	Leu	Cys	Ser 785	Tyr	Ile	Ile	Asp	Pro 790	
ttg	aat	ttg	ttt	tgg	ttt	ggc	ata	gga	aaa	gct	act	gta	ttt	tta	ctt	2455
Leu	Asn	Leu	Phe	Trp 795	Phe	Gly	Ile	Gly	Lys 800	Ala	Thr	Val	Phe	Leu 805	Leu	
ccg	gct	cta	att	ttt	gcg	gta	aaa	ctg	gct	aag	tac	tat	cggt	cga	atg	2503
Pro	Ala	Leu	Ile 810	Phe	Ala	Val	Lys	Leu 815	Ala	Lys	Tyr	Tyr	Arg 820	Arg	Met	
gat	tcg	gag	gac	gtg	tac	gat	gat	gtt	gaa	act	ata	ccc	atg	aaa	aat	2551

## VIB-034-PCT.ST25.txt

Asp	Ser	Glu	Asp	Val	Tyr	Asp	Asp	Val	Glu	Thr	Ile	Pro	Met	Lys	Asn	
		825					830					835				
atg	gaa	aat	ggt	aat	aat	ggt	tat	cat	aaa	gat	cat	gta	tat	ggt	att	2599
Met	Glu	Asn	Gly	Asn	Asn	Gly	Tyr	His	Lys	Asp	His	Val	Tyr	Gly	Ile	
	840					845					850					
cac	aat	cct	gtt	atg	aca	agc	cca	tca	caa	cat	tga	tagctgatgt				2645
His	Asn	Pro	Val	Met	Thr	Ser	Pro	Ser	Gln	His						
855					860					865						
tgaaactgct	tgagcatcag	gataactcaaa			gtggaaagga			tcacagattt			ttggtagttt			2705		
ctgggtctac	aaggactttc	caaatccagg			agcaacgcca			gtggcaacgt			agtgactcag			2765		
gcgggcacca	aggcaacggc	accatttggtc			tctgggtagt			gctttaagaa			tgaacacaat			2825		
cacgttatag	tccatggtcc	atcactattc			aaggatgact			ccctcccttc			ctgtctattt			2885		
ttgtttttta	cttttttaca	ctgagtttct			atttagacac			tacaacatat			ggggtgtttg			2945		
ttcccattgg	atgcatttct	atcaaaactc			tatcaaattgt			gatggctaga			ttctaacata			3005		
ttgccatgtg	tggagtgtgc	tgaacacaca			ccagtttaca			ggaaagatgc			attttgtgta			3065		
cagtaaacgg	tgtatatacc	ttttgttacc			acagagtttt			ttaaacaaat			gagtattata			3125		
ggacttttct	ctaaatgagc	taaataagtc			accattgact			tcttggtgct			gttgaaaata			3185		
atccattttc	actaaaagtg	tgtgaaacct			acagcatatt			cttcacgcag			agattttcat			3245		
ctattatact	ttatcaaaga	ttggccatgt			tccacttgga			aatggcatgc			aaaagccatc			3305		
atagagaaac	ctgcgtaact	ccatctgaca			aattcaaaag			agagagagag			atcttgagag			3365		
agaaatgctg	ttcgttcaaa	agtggagttg			ttttaacaga			tgccaattac			gggtgtacagt			3425		
ttaacagagt	tttctgttgc	attaggataa			acattaattg			gagtgacagt			aacatgagta			3485		
tcatcagact	agtatcaagt	gttctaaaat			gaaatatgag			aagatcctgt			cacaattctt			3545		
agatctggtg	tccagcatgg	atgaaacctt			tgagtttggt			ccctaaattt			gcatgaaagc			3605		
acaaggtaaa	tattcatttg	cttcaggagt			ttcatgttgg			atctgtcatt			atcaaaagtg			3665		
atcagcaatg	aagaactggg	cggacaaaat			ttaacgttga			tgtaatggaa			ttccagatgt			3725		
aggcattccc	cccagggtctt	ttcatgtgca			gattgcagtt			ctgattcatt			tgaataaaaa			3785		
ggaacttgg																3794

&lt;210&gt; 2

&lt;211&gt; 865

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2

Met	Ala	Leu	Val	Leu	Gly	Ser	Leu	Leu	Leu	Leu	Gly	Leu	Cys	Gly	Asn
1				5					10					15	

## VIB-034-PCT.ST25.txt

Ser Phe Ser Gly Gly Gln Pro Ser Ser Thr Asp Ala Pro Lys Ala Trp  
 20 25 30  
 Asn Tyr Glu Leu Pro Ala Thr Asn Tyr Glu Thr Gln Asp Ser His Lys  
 35 40 45  
 Ala Gly Pro Ile Gly Ile Leu Phe Glu Leu Val His Ile Phe Leu Tyr  
 50 55 60  
 Val Val Gln Pro Arg Asp Phe Pro Glu Asp Thr Leu Arg Lys Phe Leu  
 65 70 75 80  
 Gln Lys Ala Tyr Glu Ser Lys Ile Asp Tyr Asp Lys Pro Glu Thr Val  
 85 90 95  
 Ile Leu Gly Leu Lys Ile Val Tyr Tyr Glu Ala Gly Ile Ile Leu Cys  
 100 105 110  
 Cys Val Leu Gly Leu Leu Phe Ile Ile Leu Met Pro Leu Val Gly Tyr  
 115 120 125  
 Phe Phe Cys Met Cys Arg Cys Cys Asn Lys Cys Gly Gly Glu Met His  
 130 135 140  
 Gln Arg Gln Lys Glu Asn Gly Pro Phe Leu Arg Lys Cys Phe Ala Ile  
 145 150 155 160  
 Ser Leu Leu Val Ile Cys Ile Ile Ile Ser Ile Gly Ile Phe Tyr Gly  
 165 170 175  
 Phe Val Ala Asn His Gln Val Arg Thr Arg Ile Lys Arg Ser Arg Lys  
 180 185 190  
 Leu Ala Asp Ser Asn Phe Lys Asp Leu Arg Thr Leu Leu Asn Glu Thr  
 195 200 205  
 Pro Glu Gln Ile Lys Tyr Ile Leu Ala Gln Tyr Asn Thr Thr Lys Asp  
 210 215 220  
 Lys Ala Phe Thr Asp Leu Asn Ser Ile Asn Ser Val Leu Gly Gly Gly  
 225 230 235 240  
 Ile Leu Asp Arg Leu Arg Pro Asn Ile Ile Pro Val Leu Asp Glu Ile  
 245 250 255  
 Lys Ser Met Ala Thr Ala Ile Lys Glu Thr Lys Glu Ala Leu Glu Asn  
 260 265 270  
 Met Asn Ser Thr Leu Lys Ser Leu His Gln Gln Ser Thr Gln Leu Ser  
 275 280 285

## VIB-034-PCT.ST25.txt

Ser Ser Leu Thr Ser Val Lys Thr Ser Leu Arg Ser Ser Leu Asn Asp  
 290 295 300  
 Pro Leu Cys Leu Val His Pro Ser Ser Glu Thr Cys Asn Ser Ile Arg  
 305 310 315 320  
 Leu Ser Leu Ser Gln Leu Asn Ser Asn Pro Glu Leu Arg Gln Leu Pro  
 325 330 335  
 Pro Val Asp Ala Glu Leu Asp Asn Val Asn Asn Val Leu Arg Thr Asp  
 340 345 350  
 Leu Asp Gly Leu Val Gln Gln Gly Tyr Gln Ser Leu Asn Asp Ile Pro  
 355 360 365  
 Asp Arg Val Gln Arg Gln Thr Thr Thr Val Val Ala Gly Ile Lys Arg  
 370 375 380  
 Val Leu Asn Ser Ile Gly Ser Asp Ile Asp Asn Val Thr Gln Arg Leu  
 385 390 395 400  
 Pro Ile Gln Asp Ile Leu Ser Ala Phe Ser Val Tyr Val Asn Asn Thr  
 405 410 415  
 Glu Ser Tyr Ile His Arg Asn Leu Pro Thr Leu Glu Glu Tyr Asp Ser  
 420 425 430  
 Tyr Trp Trp Leu Gly Gly Leu Val Ile Cys Ser Leu Leu Thr Leu Ile  
 435 440 445  
 Val Ile Phe Tyr Tyr Leu Gly Leu Leu Cys Gly Val Cys Gly Tyr Asp  
 450 455 460  
 Arg His Ala Thr Pro Thr Thr Arg Gly Cys Val Ser Asn Thr Gly Gly  
 465 470 475 480  
 Val Phe Leu Met Val Gly Val Gly Leu Ser Phe Leu Phe Cys Trp Ile  
 485 490 495  
 Leu Met Ile Ile Val Val Leu Thr Phe Val Phe Gly Ala Asn Val Glu  
 500 505 510  
 Lys Leu Ile Cys Glu Pro Tyr Thr Ser Lys Glu Leu Phe Arg Val Leu  
 515 520 525  
 Asp Thr Pro Tyr Leu Leu Asn Glu Asp Trp Glu Tyr Tyr Leu Ser Gly  
 530 535 540  
 Lys Leu Phe Asn Lys Ser Lys Met Lys Leu Thr Phe Glu Gln Val Tyr  
 545 550 555 560

## VIB-034-PCT.ST25.txt

Ser Asp Cys Lys Lys Asn Arg Gly Thr Tyr Gly Thr Leu His Leu Gln  
 565 570 575

Asn Ser Phe Asn Ile Ser Glu His Leu Asn Ile Asn Glu His Thr Gly  
 580 585 590

Ser Ile Ser Ser Glu Leu Glu Ser Leu Lys Val Asn Leu Asn Ile Phe  
 595 600 605

Leu Leu Gly Ala Ala Gly Arg Lys Asn Leu Gln Asp Phe Ala Ala Cys  
 610 615 620

Gly Ile Asp Arg Met Asn Tyr Asp Ser Tyr Leu Ala Gln Thr Gly Lys  
 625 630 635 640

Ser Pro Ala Gly Val Asn Leu Leu Ser Phe Ala Tyr Asp Leu Glu Ala  
 645 650 655

Lys Ala Asn Ser Leu Pro Pro Gly Asn Leu Arg Asn Ser Leu Lys Arg  
 660 665 670

Asp Ala Gln Thr Ile Lys Thr Ile His Gln Gln Arg Val Leu Pro Ile  
 675 680 685

Glu Gln Ser Leu Ser Thr Leu Tyr Gln Ser Val Lys Ile Leu Gln Arg  
 690 695 700

Thr Gly Asn Gly Leu Leu Glu Arg Val Thr Arg Ile Leu Ala Ser Leu  
 705 710 715 720

Asp Phe Ala Gln Asn Phe Ile Thr Asn Asn Thr Ser Ser Val Ile Ile  
 725 730 735

Glu Glu Thr Lys Lys Tyr Gly Arg Thr Ile Ile Gly Tyr Phe Glu His  
 740 745 750

Tyr Leu Gln Trp Ile Glu Phe Ser Ile Ser Glu Lys Val Ala Ser Cys  
 755 760 765

Lys Pro Val Ala Thr Ala Leu Asp Thr Ala Val Asp Val Phe Leu Cys  
 770 775 780

Ser Tyr Ile Ile Asp Pro Leu Asn Leu Phe Trp Phe Gly Ile Gly Lys  
 785 790 795 800

Ala Thr Val Phe Leu Leu Pro Ala Leu Ile Phe Ala Val Lys Leu Ala  
 805 810 815

Lys Tyr Tyr Arg Arg Met Asp Ser Glu Asp Val Tyr Asp Asp Val Glu  
 820 825 830

VIB-034-PCT.ST25.txt

Thr Ile Pro Met Lys Asn Met Glu Asn Gly Asn Asn Gly Tyr His Lys  
835 840 845

Asp His Val Tyr Gly Ile His Asn Pro Val Met Thr Ser Pro Ser Gln  
850 855 860

His  
865